WHAT IS CLAIMED IS:

1. A method of transmitting packets via a terminal over a satellite communications network, the method comprising:

receiving a packet that conforms with a predetermined protocol;

classifying the packet based upon the predetermined protocol;

selectively storing the packet into one of a plurality of prioritized queues, the one queue being of a relatively high priority; and

scheduling the packet for transmission over the satellite communications network according to the storing step.

2. The method according to Claim 1, wherein the predetermined protocol is a transport layer protocol, the method further comprising:

determining whether the packet corresponds to an initial message in a message flow; and

selectively compressing the packet to reduce header information in response to the determining step.

3. The method according to Claim 2, wherein the transport layer protocol is TCP (Transmission Control Protocol), the message flow in the determining step includes Hyper Text Transfer Protocol (HTTP) messages.

4. The method according to Claim 3, wherein the HTTP messages include GET messages.

5. The method according to Claim 2, wherein the compressing step further comprises:

eliminating repeated header information from the packet.

6. The method according to Claim 1, further comprising:

transmitting the packet over a contention channel of the satellite communications network.

7. The method according to Claim 1, further comprising:

storing header information associated with the packet at a remote terminal.

8. The method according to Claim 1, further comprising:

determining whether a threshold of the one queue has been exceeded; and

redirecting the packet to another one of the priority queues, the one queue being of a higher priority than the other queue.

9. The method according to Claim 1, wherein the plurality of queues in the classifying step correspond to user services that include a connection-oriented service and a connectionless service.

10. The method according to Claim 1, wherein the plurality of queues in the transmitting step is prioritized using a weighting scheme that is based upon user services.

11. The method according to Claim 1, further comprising:

servicing the plurality of queues according to a schedule plan to selectively forward the packet to an uplink channel of the satellite communications network.

12. The method according to Claim 11, wherein the servicing step further comprises:

allocating a packet transmission opportunity (PTO) via the schedule plan; and

selectively preempting the PTO.

13. The method according to Claim 1, further comprising:

spoofing a source host in response to the receiving step, the source host originating the packet.

14. A terminal apparatus for transmitting packets to a satellite communications system, comprising:

a plurality of queues configured to store the packets, the plurality of queues being prioritized, wherein the packets conform with a predetermined protocol; and

classification logic configured to classify the packets based upon the predetermined protocol, wherein one of the packets is selectively stored in one of the plurality of queues, the one queue being of a relatively high priority, the one packet being scheduled for transmission over the satellite communications network according to the relative priority of the one queue.

15. The apparatus according to Claim 14, wherein the predetermined protocol is a transport layer protocol, the apparatus further comprising:

a spoofer coupled to the classification logic and configured to selectively compress the one packet to reduce header information based upon determining whether the one packet corresponds to an initial message in a message flow.

16.  The apparatus according to Claim 15, wherein the transport layer protocol is TCP (Transmission Control Protocol), the message flow includes Hyper Text Transfer Protocol (HTTP) messages.

17.  The apparatus according to Claim 16, wherein the HTTP messages include GET messages.

18.  The apparatus according to Claim 15, wherein the spoofer compresses the one packet by eliminating repeated header information from the one packet.

19.  The apparatus according to Claim 14, wherein the one packet is transmitted over a contention channel of the satellite communications network.

20.  The apparatus according to Claim 14, wherein the header information associated with the one packet is stored at a remote terminal.

21.  The apparatus according to Claim 14, wherein the one packet is redirected to another one of the priority queues if a threshold of the one queue has been exceeded, the one queue being of a higher priority than the other queue.

22.  The apparatus according to Claim 14, wherein the plurality of queues correspond to user services that include a connection-oriented service and a connectionless service.

23.  The apparatus according to Claim 14, wherein the plurality of queues are prioritized using a weighting scheme that is based upon user services.

24.  The apparatus according to Claim 14, wherein the plurality of queues are serviced according to a schedule plan, the packet being forwarded to an uplink channel of the satellite communications network.

25.  The apparatus according to Claim 24, wherein the schedule plan provides for allocation of a packet transmission opportunity (PTO), the PTO being selectively preempted.

26.  The apparatus according to Claim 14, further comprising:

a spoofer configured to transmit an acknowledgement message to a source host that originated the one packet.

27.  The apparatus according to Claim 14, wherein the plurality of queues correspond to user services that include a connection-oriented service and a connectionless service.

28.  A satellite communications system comprising:

a hub configured to control bandwidth allocations in conjunction with a satellite; and

a plurality of terminals configured to transmit packets, each of the terminals comprising,

a plurality of queues configured to store the packets, the plurality of queues being prioritized, and

classification logic configured to classify the packets based upon a predetermined protocol associated with the packets, wherein one of the packets is selectively stored in one of the plurality of queues, the one queue being of a relatively high priority, the one packet being scheduled for transmission over the satellite communications network according to the relative priority of the one queue.

29. The system according to Claim 28, wherein the predetermined protocol is a transport layer protocol, each of the plurality of terminals further comprising:

a spoofer coupled to the classification logic and configured to selectively compress the one packet to reduce header information based upon determining whether the one packet corresponds to an initial message in a message flow.

30. The system according to Claim 29, wherein the transport layer protocol is TCP (Transmission Control Protocol), the message flow includes Hyper Text Transfer Protocol (HTTP) messages.

31. The system according to Claim 30, wherein the HTTP messages include GET messages.

32. The system according to Claim 29, wherein the spoofer compresses the one packet by eliminating repeated header information from the one packet.

33. The system according to Claim 28, wherein the one packet is transmitted over a contention channel of the satellite communications network.

34. The system according to Claim 28, wherein the plurality of terminals includes a source terminal and a destination terminal, the header information associated with the one packet being stored at the destination terminal.

35. The system according to Claim 28, wherein the one packet is redirected to another one of the priority queues if a threshold of the one queue has been exceeded, the one queue being of a higher priority than the other queue.

36. The system according to Claim 28, wherein the plurality of queues correspond to user services that include a connection-oriented service and a connectionless service.

37. The system according to Claim 28, wherein the plurality of queues are prioritized using a weighting scheme that is based upon user services.

38. The system according to Claim 28, wherein the plurality of queues are serviced according to a schedule plan, the one packet being forwarded to an uplink channel of the satellite communications network.

39. The system according to Claim 38, wherein the schedule plan provides for allocation of a packet transmission opportunity (PTO), the PTO being selectively preempted.

40. A terminal apparatus for transmitting packets to a satellite communications system, comprising:

means for receiving a packet that conforms with a predetermined protocol;

means for classifying the packet based upon the predetermined protocol;

means for selectively storing the packet into one of a plurality of prioritized queues, the one queue being of a relatively high priority; and

means for scheduling the packet for transmission over the satellite communications network according to priority level of the one queue.

41. The apparatus according to Claim 40, wherein the predetermined protocol is a transport layer protocol, the apparatus further comprising:

means for determining whether the packet corresponds to an initial message in a message flow; and

means for compressing the packet to reduce header information if the packet corresponds to the initial message.

42. The apparatus according to Claim 41, wherein the transport layer protocol is TCP (Transmission Control Protocol), the message flow includes Hyper Text Transfer Protocol (HTTP) messages.

43. The apparatus according to Claim 42, wherein the HTTP messages include GET messages.

44. The apparatus according to Claim 41, wherein the compressing means eliminates repeated header information from the packet.

45. The apparatus according to Claim 40, further comprising:

means for transmitting the packet over a contention channel of the satellite communications network.

46. The apparatus according to Claim 40, further comprising:

means for storing header information associated with the packet at a remote terminal.

47. The apparatus according to Claim 40, further comprising:

means for determining whether a threshold of the one queue has been exceeded; and

means for redirecting the packet to another one of the priority queues, the one queue being of a higher priority than the other queue.

48. The apparatus according to Claim 40, wherein the plurality of queues correspond to user services that include a connection-oriented service and a connectionless service.

49. The apparatus according to Claim 40, wherein the plurality of queues are prioritized using a weighting scheme that is based upon user services.

50. The apparatus according to Claim 40, further comprising:

means for servicing the plurality of queues according to a schedule plan to selectively forward the packet to an uplink channel of the satellite communications network.

51. The apparatus according to Claim 50, wherein the servicing means comprises:

means for allocating a packet transmission opportunity (PTO) via the schedule plan; and

means for selectively preempting the PTO.

52. The apparatus according to Claim 40, further comprising:

means for spoofing a source host in response to the receiving step, the source host originating the packet.

53. A computer-readable medium carrying one or more sequences of one or more instructions for transmitting packets via a terminal over a satellite communications network, the one or more sequences of one or more instructions including instructions

which, when executed by one or more processors, cause the one or more processors to perform the steps of:

receiving a packet that conforms with a predetermined protocol;

classifying the packet based upon the predetermined protocol;

selectively storing the packet into one of a plurality of prioritized queues, the one queue being of a relatively high priority; and

scheduling the packet for transmission over the satellite communications network according to the storing step.

54. The computer-readable medium according to Claim 53, wherein the predetermined protocol is a transport layer protocol, the computer-readable medium further comprising:

determining whether the packet corresponds to an initial message in a message flow; and

selectively compressing the packet to reduce header information in response to the determining step.

55. The computer-readable medium according to Claim 54, wherein the transport layer protocol is TCP (Transmission Control Protocol), the message flow in the determining step includes Hyper Text Transfer Protocol (HTTP) messages.

56. The computer-readable medium according to Claim 55, wherein the HTTP messages include GET messages.

57. The computer-readable medium according to Claim 54, wherein the compressing step further comprises:

eliminating repeated header information from the packet.

58. The computer-readable medium according to Claim 53, wherein the one or more processors further perform the step of:

transmitting the packet over a contention channel of the satellite communications network.

59. The computer-readable medium according to Claim 53, wherein the one or more processors further perform the step of:

storing header information associated with the packet at a remote terminal.

60. The computer-readable medium according to Claim 53, wherein the one or more processors further perform the steps of:

determining whether a threshold of the one queue has been exceeded; and

redirecting the packet to another one of the priority queues, the one queue being of a higher priority than the other queue.

61. The computer-readable medium according to Claim 53, wherein the plurality of queues in the classifying step corresponds to user services that include a connection-oriented service and a connectionless service.

62. The computer-readable medium according to Claim 53, wherein the plurality of queues in the transmitting step are prioritized using a weighting scheme that is based upon user services.

63. The computer-readable medium according to Claim 53, wherein the one or more processors further perform the step of:

servicing the plurality of queues according to a schedule plan to selectively forward the packet to an uplink channel of the satellite communications network.

64. The computer-readable medium according to Claim 63, wherein the servicing step further comprises:

allocating a packet transmission opportunity (PTO) via the schedule plan; and

selectively preempting the PTO.

65. The computer-readable medium according to Claim 53, wherein the one or more processors further perform the step of:

spoofing a source host in response to the receiving step, the source host originating the packet.